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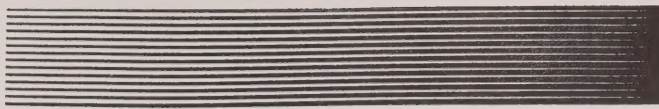
CABOOSELESS TRAINS THE PRUDENT COURSE

**FINAL ARGUMENT BEFORE THE
RAILWAY TRANSPORT COMMITTEE OF
THE CANADIAN TRANSPORT COMMISSION
URGING CAUTION IN THE INTRODUCTION OF
CABOOSELESS TRAINS IN HIGH-DENSITY
AREAS WHERE PUBLIC SAFETY MAY BE
SEVERELY AFFECTED.**

TORONTO, CANADA
JUNE 1987

M-TRAC is a non-profit Metrowide umbrella organization of ratepayers, residents and other groups who following the Mississauga train derailment joined forces to investigate and advocate rail safety in densely populated urban areas. Members are committed to initiate legislative and other changes necessary to ensure public safety particularly in the transport of dangerous commodities by rail.

We gratefully acknowledge contributions from individuals, groups, municipalities and the Province of Ontario whose support made this and other reports and submissions possible.



M-TRAC

for rail safety

METRO TORONTO RESIDENTS' ACTION COMMITTEE

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June 8, 1987

Chairman J.F. Walter
Commissioner J.G. Drainville
Commissioner R.J. Orange
Railway Transport Committee
Canadian Transport Commission
Ottawa

Dear Chairman and Commissioners,

Applications by railways to operate
cabooseless trains and tests to evaluate
reliability of end-of-train unit and
associated devices. File Nos.4357R90-A.1
and 4357R90-A.2

We are pleased to transmit herewith FINAL ARGUMENT in the
matter of the railways' proposal to operate cabooseless trains
across the country.

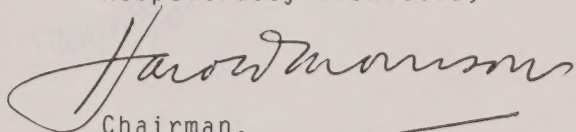
We are concerned about the possible escalation of public
risks, especially in the haulage of dangerous goods through
high-density areas.

While rail technology must be encouraged, removal of the
rear-end trainman and replacement with a device of limited
flexibility may lead to serious accidents and the loss of life and
property.

On behalf of the many communities which have voiced similar
concern we plead for a cautious approach, a gradual introduction
of the new process in areas where the risk may be lessened by low
population densities and easy escape channels.

The railways' argument that costs must be reduced to meet
American rail competition is not, in our view, tenable or sustainable
in this case. In the haulage of dangerous goods the margin of safety
must not be reduced simply for the sake of an improved ledger.

Respectfully submitted,


Chairman.

M-TRAC
for rail safety

STATION BOARDING AND ALIGHTING COMMITTEE
STATION BOARDING AND ALIGHTING COMMITTEE

June 2, 1987

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Question: *"If I put it to you that the alternative of protecting the public weighed against a possible shrinkage or disappearance of the industry, what would you put first?"*

Mr. Winsor: *"Personally?"*

Question: *"Yes."*

Mr. Winsor: *"I would ensure safe operations first."*

— **Robert B. Winsor**, Canadian Railway and Transit Manufacturers Association, testifying before the RTC, Toronto, January 9, 1987

"Although the Railways gave assurances that they did not intend to lay off conductors, it appears that one of their long-term goals may be to reduce freight train crews to two employees. This possibility brings with it certain operational and safety considerations which would have to be addressed by the RTC in the final determination of this case."

— **RTC Chairman J.F. Walter** and
Commissioner Mike Landers in RTC
Decision on Cabooseless Trains
testing September 1985.

"One of the particular tests scheduled was to initiate emergency brake application from the head end. After trying unsuccessfully nine times, including myself and the engineer trying once, the emergency application finally worked. On the test train survey, K.L. Hammell reported after three tries before the emergency function was successful."

— **Allan Cosco**, Alberta
Caboose Committee, testifying
before the Railway Transport Committee,
Edmonton, Alta.,
January 27, 1987.

" . . . what they do in the States is entirely up to them. I have no respect for many of the things they do in the States. You know, let us face it, they kill 600 people a year, in Detroit alone; they do many things down there . . . Because they do, are we supposed to follow their examples?"

— **Michael Kevin Hayes**,
UTU Local 483, testifying
before the RTC, Toronto,
January 7, 1987.

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I. INTRODUCTION

Across the country signs of disquiet are still discernible. When the railways first applied in 1984 for removal of the caboose and the rear-end trainman, many communities reacted with alarm. The intensity of that alarm has somewhat abated but it has not disappeared.

Freight trains in Canada carry many dangerous products. These trains have become longer and heavier. A variety of accidents has defined the extent of the threat to the public when such dangerous-goods trains derail, collide or explode. It is widely accepted that special care must be taken in the handling and running of such trains.

Accidents do not help the railways any more than they help the public. Canadian railways claim they have the best safety record in North America. But accidents do happen and federal investigators have raised questions about the integrity of certain pieces of rail equipment. Foreign rail cars also travel on Canadian roads. And the Railway Transport Committee is well aware of what defects RTC staff has found on American tank cars crossing into Canada.

Eventually, technology may lead to better ways of handling rail systems. Railways must be encouraged in that direction — in acceptable stages so that current safety rules are not undermined. The public must accept some risks, but not those which can cause undue harm and suffering and which can be avoided.

We believe this attitude is widely held in Canada. We believe the existing laws and regulations are designed for that purpose. We believe they relate to a federal sensitivity to the need to protect a vulnerable public.

And so we believe that safety is the central issue in this case. Not some form of diffused promise but safety as defined by the RTC and the federal government. It is no accident that the Minister of Transport, Mr. Crosbie, declared the government's goal as "optimum safety" for the Canadian rail system. Optimum or maximum safety has been defined as the goal and obligation of the RTC as far back as 1972 and reconfirmed in the RTC decision of August 29, 1986, arising out of the Trudel collision in Drummondville, Que., on February 15, 1986.

Simply put, would cabooseless trains — trains without the presence of a rear-end trainman — enhance rail safety? Would the public feel better protected without the rear trainman when dangerous goods are transported through their neighbourhoods? The answers relate to the reliability and ability of the replacement units to do as much and even more than the rear trainman does.

These public hearings have been designed to judge the true value of the end-of-train unit, which basically measures air brake pressure, and the true value of the rear-end trainman who does a lot more than merely watch air brake pressure. We have seen improvements in the handling of dangerous goods but we also have heard testimony from rail employees about the problems that still exist.



Ethylene dichloride leaks in 19-car derailment of flammable and caustic chemical train near Fraser River, Fort Langley, B.C., February 17, 1986. (Photo: Canapress)

We shall deal with these matters in this Final Argument. We shall also deal with the problems discovered by Mr. Justice René Foisie in his investigation of the Hinton, Alta., disaster. There is no question in our minds that whatever value may be placed on the end-of-train unit to provide information on air brake pressure, it cannot replace the duties of the rear-end trainman in watching for shifted loads, train and roadside fires, smoke and fumes from defective wheels or tank cars and the ability to raise instant alarm in the event of a serious mishap.

We have seen during these public hearings the determined effort of rail management to downgrade the effectiveness of the rear-end trainman. Management has strained argument to deny the worker the right, let alone the company's gratitude, to claim the discovery of certain defects in train equipment or operations.

However, Canadian National witness Patrick Ross has acknowledged the value of the presence of the rear-end trainman — economic value beneficial to the company's financial status. What is the price of this value?

The economic value of accident prevention must be high because some of the accidents have produced high-cost damages and therefore the prevention of such accidents reduces economic costs, let alone the reduction in human suffering. To gain some insight on this important point, the RTC asked the railways to provide an estimate of accident costs. The railways refused to comply.

Eager to provide elaborate estimates on the cost of maintaining the caboose — even to the point of estimating the amount of wear on rails because the caboose travels on rails — the railways remain silent on the obvious high cost of accidents. Why this reluctance? Is it a case where potential savings from removal of caboose would be more than offset by higher accident costs?

Why then this concentrated effort to remove the caboose? Is it the final step or the first step in reduction of operational costs? Is the real aim the reduction of manpower in train operations? And if so, will public risk increase? Although the RTC has ruled out evidence on train crew reduction in these hearings, evidence was produced in previous RTC sessions that rail management intends to cut train crews and that is where the real savings will emerge.

We feel it is pertinent to refer the Chairman of the RTC to his decision of September 1985 where he stated:

"Although the railways gave assurances that they did not intend to lay off conductors, it appears that one of their long-term goals may be to reduce freight train crews to two employees. This possibility brings with it certain operational and safety considerations which would have to be addressed by the RTC in the final determination of this case."

Under the existing state of technology, we believe there will be safety problems in any decision allowing the railways to operate cabooseless trains holus bolus across the country. We should not discourage the railways from pursuing technological improvements that will promote safer trains but the benefits of this technology must be thoroughly proven before it is allowed to replace existing procedures.

II. THE ELUSIVE THRESHOLD

Everyone would like to see the railways operate at maximum efficiency and at minimum costs. No one wants to burden the railways with such high expenditures that rail transport becomes prohibitive and investment dries up.

But a railway that operates at high speeds through high-density areas, carrying heavy loads of toxic and explosive chemicals, must acknowledge special obligations to protect those people who may be at risk.

Throughout the public hearings the RTC heard pledges by the applicant companies that they intend to give safety the highest priority. But they repeatedly expressed concern over costs and repeatedly argued that safety improvements must be related to cost/benefits — and who is to judge the value of a safety innovation? As the RTC stated in its September 1985 Decision on cabooseless train testing, it is difficult to place a clear stamp on the safety factor. How much safety will be lost if the Uniform Code of Operating Rules is amended to grant the railways their wishes?

The railways claim there will be no loss: the unions produced documentary evidence indicating there will be heavy loss. Cities and towns have called for rejection of the railways' applications on the grounds that their citizens will be at risk. Some of the outcry on both sides was obviously achieved through lobbying,

but the genuine undercurrent is one of deep concern — the concern that removing the caboose and rear-end trainman will lead to lower levels of safety.

The obligations of the Railway Transport Committee, under the law, have been stated many times. The RTC must ensure that the railways operate at maximum safety. On August 29, 1986, the RTC reiterated its obligation when it stated in its Decision on the Trudel Collision that it intended to ensure "maximum and realistic safety for the public."

It is interesting to note in that Decision the RTC found it necessary to comment that " Safety deserves a higher place in corporate priorities than Mr. Hogan (Assistant Chief Transportation Operations CN) indicated when he described the CN system as 'adequate'."

Along similar lines, Mr. Justice René P. Foisy also voiced criticism of CN management attitudes toward safety, especially in relation to supervision of operating staff. It is baffling to hear repeated pledges, fervent pledges by rail management concerning their loyalty to safety, only to find their practices somewhat less passionate, and indeed a possible menace to the public.

The only prudent conclusion that the RTC can reach is that rail management, as skillful as it may be, still requires supervisory watchfulness under the eye of the regulatory agency. And that includes a sharp review of management assurances that cabooseless operations are safe and even safer than the existing practice of placing a trained employee at the rear of long, heavy trains carrying dangerous goods.

You will recall the M-TRAC submission of January 26, 1987, arising out of a conclusion by Mr. Justice Foisy that CN management either directly or indirectly committed an act adversely affecting public safety, thereby contributing to the Hinton, Alberta, rail disaster of February 8, 1986, which took 23 lives.

Specifically, Mr. Justice Foisy stated that CN management "bears a significant degree of responsibility" for the non-compliance by the conductor of the 413 freight train in making an emergency brake application when he failed to receive a radio acknowledgement from the engineer on passing a wayside signal.



Mountain of debris dwarfs CN worker at 38-car freight train derailment in Thomson, N.S., one of six in less than a month in the Maritimes, March 9, 1987. (Photo: Canapress)

The suggestion left by Mr. Justice Foisy is that CN management watered down CN operating instructions — not to promote safety but to remove "any impediment to the operation of cabooseseless trains." How can the public trust rail management under such a shocking disclosure? What was going on in the minds of CN management that it would take such action without informing the operating crews or, as far as we know, the RTC? We suggest the Foisy statement burdens the RTC with added responsibility to ensure public safety in the operations of our railways.

The RTC has agreed to address the M-TRAC submission in its final report. The public does not seek to interfere with corporate policies and functions but it must raise a protest when an act detrimental to public safety is disclosed by an experienced member of the Canadian judiciary.

Of course, the argument can be made that the quality of safety afforded by the end-of-train unit rests not so much on rail management but on the construction of the unit and the quality of its performance. What has been built into that performance is that ordered by rail management and we have seen from the evidence before these public hearings that the performance is narrow and inflexible. The end-of-train unit cannot perform all the functions of the rear-end trainman. And on occasion the end-of-train unit can malfunction and there is no back-up unit.

The question that the RTC must resolve is what degree of safety is adequate in the operation of these long heavy trains carrying dangerous goods at high speeds? Does the end-of-train unit provide that degree of safety? And how do we know what constitutes adequate safety? We have to accept that perfect safety may be unattainable; some risk is inherent in the operation of such trains across Canada. But a high degree of safety is attainable, probably involving extra

costs. Where is the threshold? Must we sacrifice a degree of safety in order to make the railways more profitable? Is that the goal of the RTC? We say it is not. The RTC has expressed a goal of attaining maximum safety and the Minister of Transport has echoed that pledge.

The threshold must therefore be at the least a high degree of safety. We suggest that removal of the rear-end trainman without more experience with the functions and capabilities of the end-of-train unit does not ensure this high degree of safety. It implies acceptance of more risk. It implies acceptance that some duties and functions of the rear-end trainman must be sacrificed. Why? Because the railways say so. The railways maintain the end-of-train unit provides all the safety required. The railways' assurances have been challenged in these proceedings with the result that there is a residue of doubt. It would be prudent in such circumstances that the benefit of the doubt should rest on the side of safety.

III. WITH SMOKE AND MIRRORS

There is a tendency in Canada to look to the United States for solutions. If a certain practice is good enough for the U.S., why should it not be good enough for Canada?

We have seen problems with American solutions. Of course, there are great successes in the U.S., as there are in Japan and in Europe, and we should be grateful to have these successes available to Canadians.

In the case of cabooseless operations, we are not sure what the American success rate is, although the RTC has been presented with a lot of figures, augmented by American witnesses who claim that generally the accident rate of cabooseless trains is really no different from those trains with cabooses.

We do not know the specific details of the American accident rate because of the strange manner — the rather loose manner — in which U.S. authorities gather accident statistics.

As intervenors, we have made statements during these proceedings that the American accident reporting is nothing short of a disgrace. It was designed by U.S. authorities, in conjunction with the railways, to provide a broad picture of certain kinds of accidents, causing certain kinds of damages. But to seize on

these figures and present them as all-encompassing is, in fact, to present a misconception and indeed a misleading picture of the true American situation.

A leak or tear in a tank car may be mended for less than, say \$5,000, but that accident may point to a problem in operations or construction that might lead to far more significant damage. Yet, under the American reporting system, that accident would not come to the attention of the regulatory authorities.

A train may roll by and escaping gases may blow the roof off a neighbouring school and again there would be no accident report in Washington because third-party damage need not be included. As one rail witness stated in the witness stand, a whole carload of Cadillacs may be destroyed and there would be no report in Washington because the Federal Railroad Administration does not require that such accidents be reported.

The escape hatches in the American accident reporting system are so apparent that even the U.S. Congressional Office of Technology Assessment has found reason to complain. In its publication, 'Transportation of Hazardous Materials', issued in 1986, the Office listed major accidents that should have been included in the FRA accident reports but were not.

Those kinds of accidents could not escape the attention of the RTC in Canada because of the far more stringent regulatory demands in Canada and thankfully so.

Do we want to follow the example of the American reporting system as adequate for Canadian needs? Do we think the American system is adequate on which to base a Canadian regulatory decision? We submit there are gaps in the

American system, raising questions about reliability. Cabooseless trains do operate in the U.S. and we can assume that most of these trains operate safely, or at least operate without spectacular accidents that would normally gain public attention.

And even in these cases, where spectacular accidents gain public attention, the railway argument goes like this: Well, the cabooseless train may have had an accident but that accident would have occurred even with a caboose on the train . The fact that there was no caboose and no rail employee at the rear of the train really makes no difference. There would have been an accident anyway.



Two trainmen are injured as 10 cars derail. Field near North Bay, Ont., June 11, 1986. (Photo: Canapress)

We submit there is a difference. We submit there is value in retention of the rear-end trainman, especially in the haulage of dangerous goods in built-up areas where evacuation is difficult and where heavy damage may result. If the United States wishes to apply a practice and policy that involves heavy public risk, that is the business of the United States. It is not necessary for Canada to slavishly follow every American practice.

The railways may argue that if we do not follow the U.S. pattern, Canadian industry will fall behind and will be destroyed through competition. Of course, that cannot be allowed to happen. And we don't think it will. We believe the Canadian rail system can meet competition through accident-free efficiency. It is the cost of accidents that deliver a heavy blow to the rail industry and shippers. The railways refuse to disclose accident costs. But we surmise that they are heavy. Someone has to pay for these accidents. And some pay with their lives.

Safety must in any case be the prior consideration. It is the acknowledged policy of the federal administration in Canada and it is the acknowledged obligation of the RTC. Attempts to rationalize safety in terms of costs may lead to the acceptance of short-cuts and the kind of logic that contributed to the Hinton disaster. Rigid adherence to safety can make a healthy contribution to the railways' economic welfare.

And while the RTC considers the American situation and the railways' assertions that most states now approve of caboosless operations, what some states have tried to do to restore the caboose should not be overlooked.

Last year a major derailment in San Antonio, Texas, gave way to anguish as a fireball exploded over a remote portion of the city. It was a costly accident. A public call for remedial action led to the Texas Railroad Commission to hold

hearings and issue a regulation restoring the caboose to dangerous-goods trains. American witnesses appearing for the railways did not tell you about the issue. Alderman Michael Walker of Toronto brought it to the RTC's attention and filed a copy of the regulation which disclosed that the railways and carriers fought against the regulation, not on the basis of safety but on the basis of costs. And the struggle is not over. The railways and carriers have enjoined the Commission in the courts and in American courts the railways and shippers invariably win.

A number of U.S. cities, concerned over the power of railways and the threat of dangerous-goods rail traffic in their midst, are seeking to band together to find ways of reshaping U.S. laws to give them some degree of power to protect their citizens. On a number of fronts, many Canadians are concerned over American policy. Rail safety is one of them. Canadian standards are higher. We are sure the RTC will try to keep them that way.

IV. EVALUATING THE TESTS

Tests conducted under the watchful eye of the RTC staff indicated that the end-of-train unit has a degree of reliability that likely will increase as new generations are developed.

Some failures in the tests have occurred, both in the laboratory and in the field. We are not too sure how well the emergency brake application will work under high speeds and extreme temperatures in a real environment since no high-speed, long-range testing was undertaken. We realize a costly derailment might have occurred.

So some doubts remain. Pins that are not strong enough. Aluminum shavings discovered in the equipment requiring the hasty addition of filters. The feeling you get of ad hoc improvements rushed by the manufacturer to overcome problems which the manufacturer did not foresee.

The main function of the unit, to record and transmit air brake pressure, seems to work most of the time. Effectiveness of some other functions, such as the Distance Measuring Device, appears to be more questionable.

Argument arising out of the test results has led to disputes between rail management and rail employees. Did a certain mishap occur within the official test

period? Was the rear-end trainman really the first to discover the deficiency that might have led to an accident if not discovered?

These are small points in a struggle in which the public may become the victim. Whether the rear-end trainman was the first to discover a major problem or whether some other employee made the discovery is, in our view, less important than the fact that the problem was there. It indicated an existing defect, a risk, which had to be overcome. Does the removal of the rear-end trainman improve the situation or does his presence add assurance to the eventual discovery of a defect?

The railways argue that the safety picture must be viewed totally. They suggest we should not view the end-of-train unit tests in isolation but in relation to the safety technology already in place — double-shelf couplers, insulation and hot-box detectors. Also centrally-controlled signalling and, now, safety reset buttons. In the future may come advanced train control systems and maybe in the distant future we will even see super-conductors permitting elevated, magnet-driven electric carriers.

Unfortunately, we cannot rely on predictions or the testing of evolutionary changes that may affect future generations. The decision of the RTC must be based on existing operations and the problems we face today. These problems have been brought to the RTC's attention: hot-box detectors that don't work; radio equipment that fails to connect; switches that malfunction.

The number of malfunctions and failures in this safety equipment may be small in comparison to the total times the equipment works or is perceived to work. Nevertheless, if equipment fails once, it can fail again and no one can tell at this stage where or when that failure may come. In Canada, we have reached a

certain level of safety performance. There is no denial that it can be improved, especially where it needs to be improved — in the high-density areas where evacuation is an acknowledged difficulty. Does the end-of-train unit provide that improvement or does it reduce the level of performance that already exists?

Can the RTC rely on the tests that have taken place as proof that safety will be improved or even sustained? We suggest the tests, while demonstrating some degree of reliability, do not provide that necessary level of assurance permitting the RTC to sweep away the operating rules that will allow removal of the rear-end trainman.

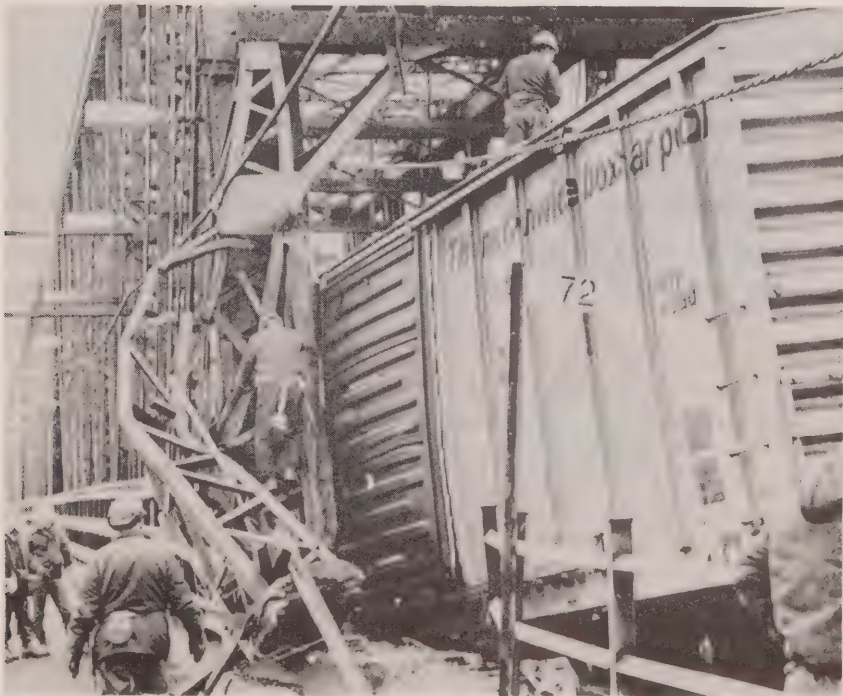
It may be possible to accept the added risks in remote areas where a major accident might be absorbed without heavy loss of life or property damage. But to introduce the new technology right across the country, on the basis of the tests results, would not in our view conform with the safety standards established by the RTC and the RTC's acknowledged obligation of ensuring that the railways operate at maximum safety.

We are not certain, for example, how the emergency brake application would function under various operating conditions, in various terrain, under various weather conditions and under a prolonged period of unit stress and metal and battery fatigue.

We don't know because the emergency brake function has not been tested under full operating conditions over an extensive time period. We can reach conclusions, based on the laboratory tests, although there may be operating conditions that the laboratory technicians did not consider. But no matter what conclusions we may reach, there must remain an element of doubt. And if doubt remains, should it not rest on the side of safety?

Technology must not be discouraged but neither must safety be diluted.

During the No. 3 General Train Run test period, a number of incidents took place, including numerous incidents of sticking brakes, protruding loads, spring switches that did not return to normal position, long train reversals, observance of dangerous conditions on passing trains. All these and other incidents were first reported by the rear-end trainman.



Rail workers inspect damage to Victoria Bridge after a 95-car freight train derailed and slammed into the structure, Montreal, Quebec, March 20, 1987. (Photo: Canapress)

The railways and the unions may debate individual figures but on the whole the test proved what the employees have stated — that the rear-end trainman plays a valuable role to protect the train and the public and that removing him from the rear of the train will simply expose the public to higher risks.

The railways argue that some of the duties of the rear-end trainman can be performed just as well from the front-end cab but it is obvious that is not the case. The rear-end trainman has better visibility and more freedom to move in the caboose than he would have in the front-end cab.

The railways also argue that in the United States the rail employees are equally concerned about safety and they do not complain about performing their duties from the front of the train. We do not accept that statement as factual. It would be unfair to suggest that American rail employees invited removal of the caboose and pleaded for transfer to the front-end. They were virtually forced to accept an agreement under a Presidential cloud that threatened to deliver the storm that befell U.S. air controllers — either comply with the employers' wishes or face the prospect of being thrown off the job.

It may also be a valid argument that the American political system allows a degree of public risk which we may not tolerate in this country.

V. TRUE INTENTIONS

Although the central issue in this case is undoubtedly safety, substantial railway evidence dwelt on the economic benefits of removing the caboose from operational service.

The railways estimated that the two major carriers together may save about \$60 million a year in operational expenses.

That may seem to be a substantial sum in total but when separated and related to individual railway operating budgets it is not an overwhelming accumulation.

Indeed, under cross-examination, it was determined that CP's saving may not total more than \$15 million a year net after taxes. And if you relate that potential saving to the cost of just one major accident, the saving can disappear, swallowed up by damages and suffering that, possibly, might have been avoided.

We have stated previously that the railways were eager to provide the minutest detail on how the savings on removal of the caboose can be achieved, even to point of measuring the financial cost of reducing wear and tear on the rail surface.

However, it was another matter when the railways were asked to provide figures on accident costs. The railways refused to provide that information. So we are left with conjecture and with published and unverified estimates of accident costs.

If there is a relationship between accident costs and potential operational savings, we may well ask why the railways are pushing so hard for elimination of the caboose when the result may be only marginal operational benefits at a price of possibly higher risks?

Surely, we must ask: what are the railways' true intentions? We have been told by the railways at these hearings that the only employment change will be removal of the rear-end trainman and placing him in the front-end cab along with the brakeman and engineman. Instead of two men in the cab, there will be three men, with no logical need for three men. What is the sense of this move and what relationship has this move to the railways' application for elimination of the caboose?

If we have a dangerous-goods train measuring up to two miles in length with three men in the front-end cab and no person at the rear, can we conclude that this kind of employment structure adds operational safety or does it detract from safety? How far back can the front-end crew see? What happens if there is a fire in a car well to the rear? How much time is lost in long reversals during a heavy storm if a front-end employee must trudge to the rear and find some foothold from which to direct the reversal?

It doesn't seem to make much sense to leave the rear of such a train unmanned unless the economic costs are so overwhelming as to force the railways to take such action. But if the employee in the front-end is to be paid the

same amount of money he would have been paid manning the rear-end, what major saving is there in removing the rear-end trainman?

There is, of course, no major saving unless the true intention of the railways is to do away with one of the crew members, thereby achieving a major cost reduction.

We make this reference simply to highlight the RTC's own statement in the September 1985 RTC Decision wherein it is stated on page 37:

"Although the railways gave assurances that they did not intend to lay off conductors, it appears that one of their long-term goals may be to reduce freight train crews to two employees. This possibility brings with it certain operational and safety considerations which would have to be addressed by the RTC in the final determination of this case."

We do not intend to go into this matter of future employment since the RTC ruled that employment was not to be considered in relation to the present application. It would have to be addressed on some future occasion — should the RTC allow caboosless operations and should the railways decide thereafter to reduce the three men in the front-end cab to two.

However, we do not see how the RTC can rule that there is a need for three men in the front-end cab when, in fact, the current crew of two seems to suffice. And, if the RTC cannot provide any valid reason for maintaining three men in the front-end cab, how can it possibly rule against eventual reduction to two men in some future railway application?



Best track in country, site of 99-car coal train derailment, 90km west of Jasper in Rocky Mountains, January 27, 1987. (Photo: Edmonton Journal)

We submit that the RTC must consider the railways' true intentions in their entirety in ruling on the current application. The railways want the Uniform Code of Operating Rules amended, not to operate three-men front-end crews, but to operate trains without a caboose and without a rear-end trainman. It is our view that an RTC decision in favour of the railways' applications would place the onus of consequences squarely on the shoulders of the RTC.

Whether there are two men in the front-end cab or three men would seem to be mostly a matter of bargaining by rail management and unions. The margin of operational safety between two men and three men in the cab would seem inconsequential. It may be that two men in the cab might weigh on the side of safety since there would be less opportunity for distraction.

And if it is a question of one of the three men keeping an eye on the back of the train, it is questionable whether he can see much from the front-end, especially if the train runs 10,000 feet in length.

Placing three employees in the front-end cab is simply a temporary ploy, a piece of management strategy which should be recognized for what it is — a manoeuvre to keep the unions quiet while the operating rules are changed and before the third man in the cab is fired or retired.

VI. THE PRUDENT COURSE

This catalogue of fault-finding and exposure of the railways' case is not intended to discourage improvements in rail technology which may lead to safer trains and lower cost transport.

Along with safety, the RTC must also consider the railways' well-being. No one in Canada wants to see Canadian railways crushed by American competition. And if the railways come up with a solid idea that will lead to lower costs without threatening safety, we should all get behind the railways and give them an extra push.

In this particular case, the limitations of the end-of-train unit and some of its internal weaknesses may raise questions about its true value. Only time will tell. It may be that the railways can operate short trains in low-density areas without a caboose without jeopardizing safety. The latest version of the end-of-train unit may be sufficient when used on longer trains in remote areas where populations are not threatened, although we must always be alert to environmental damage difficult to rectify.

The RTC will recall the serious impact of the Livingston, La., derailment of 1982. Not only were people forced out of their homes for two weeks and 19 buildings destroyed but the mixtures of poisons strewn over the grounds by

exploding tank cars spread contamination over an area equivalent to a three-foot ditch 20 miles long. It took years to dig and haul away the contaminated earth.

The consequences of a chemical spill are well known to the RTC. There is no need to emphasize the horrors of disease and human degradation caused by chemical contamination, no matter what the source may be. And while the railways may be quick to argue that no one has died from a rail chemical spill in Canada, no one can say how many may have faced a slow death because of the aftermath of a chemical spill, or a persistent or intermittent chemical leak.

We are sure that all parties to these proceedings will agree that extreme care must be taken in the haulage of dangerous goods, especially in high-density areas where evacuation may be difficult and where chemical contamination may prove more insidious.

So the RTC may be faced with a problem — how to encourage the railways to proceed with technology while seeking every means possible to prevent dangerous accidents.

We submit the solution lies within the pages of the RTC's Directions of September 26, 1986, and in the RTC's Decision issued August 29, 1986, on the Quebec North Shore and Labrador Railway case.

That Decision, issued by Commissioners Dubé, Orange and Bourret, allowed removal of the caboose and use of the end-of-train unit in a remote area. It specifically concluded that the possibility of a serious accident in that area was small; that the ore trains involved proceeded at moderate speed. Nevertheless,

the Decision demanded state-of-the-art technology, including remote control emergency brake application at the rear of the train. The Decision also stated:

"The specific type of end-of-train unit to be installed and the installation procedure must be approved by the Commission."

In Item No. 6 of the RTC's Directions of September 26, 1986, the RTC raised the possibility that "limited acceptance or rejection" of the present applications may be in the public interest, including special circumstances where caboosless trains may be operated at specific times, locations or operating conditions.

We understand the RTC reason for embracing a possible partial or limited solution. This is a highly controversial and important issue. The RTC is to be commended for the extensive public hearings and the patience and tolerance extended to intervenors in seeking a prudent judgement.

But in considering that the consequences of the RTC's decision may have grave import for many people, it would seem wise to proceed with caution. We cannot quantify the added risk to urban communities by removing the caboose. The public can perceive there will be added risk and evidence has been placed before the RTC on the public's concern.

We suggest further that in matter of law this is not a case where the public must defend itself against the railways' applications. The onus of proof lies with the railways. That was stated specifically in the findings of Mr. Justice Samuel Grange in the investigation of the 1979 Mississauga derailment. It is up to the railways to prove that removal of the caboose from dangerous-goods trains and substituting the end-of-train unit for the rear-end trainman will not reduce public safety.

It is clear from the evidence placed before the RTC that the end-of -train unit cannot perform the safety duties of the rear-end trainman and that public risks will increase.

Must the public absorb these added risks? That responsibility must remain with the RTC. The obligation of the RTC is to protect the public. It has accepted that obligation and in the exercise of its jurisdiction the RTC can proceed with caution.



Potentially lethal chemical tank car is hoisted back on track by CN workers and evacuation of downtown is called off, Orillia, Ontario, April 6, 1987. (Photo: Toronto Star)

The gradual introduction of new technology is a well-tried process. Experience is gained and risk is reduced. During the process of gradual introduction, federal monitoring will gather increasing evidence of operating capabilities or system weaknesses.

This, in our view, is the prudent course to follow. It demonstrates judicious restraint. It demonstrates concern for the railways' economic welfare and it demonstrates a prior need to protect the public.

